



HUMAN CAPITAL INVESTMENT AND FINANCIAL PERFORMANCE: A STUDY OF DEPOSIT MONEY BANKS IN NIGERIA

Ezekwesili, Tochukwu P. & Ezejiofor, Raymond A.

Department of Accountancy Nnamdi Azikiwe University, Awka

Mail: ezekwesilitochukwu@gmail.com; thaddray4life@yahoo.com

Abstract

This study examined the effect of human capital investment on financial performance of deposit money banks listed on Nigeria stock exchange. Ex-post facto research design was adopted. Data were extracted from annual accounts of the selected banks and were tested with regression analysis with aid of E-view 9.0. This study revealed that human capital investment has not positively and significantly affected return on capital employed of listed deposit money banks in Nigeria. The study therefore recommended that organizations should put in more financial resources or sources of investments in the human resources and personnel management in order to encourage the employees on the jobs thus enhancing specialization and positive influence on financial performance.

Keywords: Human Capital Investment, Financial Performance and ROCE

Introduction

Human resources (HR) are critical in today's world. Creativity, innovative ideas, and innovations are the foundations of today's enterprises. As a result, entrepreneurs view human resources as an investment in human capital. Various considerations, such as tax savings and future earnings from adopted technologies, can encourage them. In order to enhance productivity and innovation in entrepreneurship, HR as an asset investment is critical (Kucharcikova 2014; Popescu and Gheorghe, 2019a). Knowledge, skills, attitudes, and motivation belonging to an enterprise or society and engaged in the development of that enterprise or society to fulfill its objectives and to improve the quality of life of its members, according to Igun (2006), a synthesis of the most popular attempts at defining Human capital; Knowledge and skills obtained via education, training, and experience; and facilitated by an enabling environment; and that intangible aspect of the manufacturing process that contributes human intelligence, skills, and competencies in the production and provision of goods and services. Human capital can be defined as an individual's core and distinctive talent in the entrepreneurial or other operations of an organization or economy.

Human Resource Accounting is defined as "the process of identifying, measuring, and distributing data on human resources to interested parties" (Micah, Ofurum., and Ihendinih; 2012). As a result, everything that improves human productivity, stimulates resourcefulness, and enhances human dignity and overall quality of life while refining attitudes is an important aspect of any nation's human capital. The education system, health and social services, as well as strong governance, will be among the four cardinal features. The present COVID-19 pandemic crisis showed the value of HR investment, as driven individuals were adaptive and supportive to businesses functioning under limits (Umana, Okoli, Ubong, Onah and Zubair, 2021).

Firm performance, according to Divenney, Richard, Yip, and Johnson (2008), comprises the following key categories of firm outcomes: Financial performance (profits, return on assets, and return on equity); market performance (sales, market share); and shareholder return (total shareholder return, economic value added) Academically, firm performance is the ultimate dependent variable of interest for anyone interested in management: accounting is concerned with measuring performance; marketing is concerned with customer satisfaction and market share; operations management is concerned with productivity and cost of operations; organizational behavior is concerned with employee satisfaction and structural efficiency; and finance is concerned with capital market efficiency. Management journal, the academy of management journal, and administrative science quarterly all included certain metrics of company performance in response to all of the above.

This goes against the accounting practice of writing them off against profit in the profit and loss account as if they were entirely expenses. Human resources accounting arose from the failure of professional accountants to treat human resources as assets in the same way that physical and financial assets are treated (Eddie and Peter, 2002).

Many authors have suggested that human resources should be viewed as a capital investment, but human beings, like any tangible asset, cannot be held in one place without the desire to transfer from one company to the next. Furthermore, because the life span cannot be known, determining the depreciation rate is challenging. It is thus upsetting to learn that the financial accounts presented by the majority of Nigeria's deposit money banks and other parts of the world are yet to fully recognize this all-important -asset (Jeroh, 2008). Due to a tight job schedule and a large financial aim, the majority of bank employees were discharged, and those who remained after the reform were not allowed to pursue higher education. Even in

cases where banks have invested heavily in staff training and development, it is difficult to say if this has resulted in improved financial performance and productivity. The study therefore determine the extent to which human capital investment affects return on capital employed of selected deposit money banks listed on Nigeria Stock exchange.

LITERATURE REVIEW

Human Capital Investment

In terms of human capital investment, evaluating the efficacy of long-term education programs and ongoing training sessions is critical for enhancing productivity, demonstrating to be essential for healthy and resilient economies, as well as economic growth and long-term development (European Commission 2017). Furthermore, it should be noted that, in the current era, HR experts encourage investments in education, training, and personal and professional development in order to improve business performance, demonstrating the critical relationship that exists between HR, human resources investments (HRM), and business performance (OECD 2012). Furthermore, in the post-COVID-19 period, quality paired with business performance is the key to successful entrepreneurship (OECD 2020). Zahid (2015) claims that Human capital is a term that refers to the process of improving an employee's knowledge, skill, skills, and social assets through education, training, and other professional activities. This, in turn, contributes to employee happiness and performance, as well as firm performance. Thus, "the information, skills, abilities, and traits embodied in humans that facilitate the construction of personal, societal, and economic well-being" is the definition of human capital. Firms must aim for superior competitive advantages in a continually changing business environment by implementing dynamic business plans that integrate creativity and innovation. It is fundamentally important for long-term viability. There is no doubt that human resource contribution plays a crucial role in enhancing productivity. As a result, human capital refers to the quality of individuals within a company. It's a metaphor for education and training's economic potential (Teixeira, 2005). HRA implies that employees are a company's resource. Human capital refers to the personnel of an organization who are described in terms of their training, judgment, intelligence, relationships, and insights. As a result, human capital has been characterized as a critical component in upgrading a company's assets and personnel in order to boost productivity and maintain a competitive advantage (Simkovic, 2013).

In general, one of the primary determinant elements that are commonly utilized in measuring the success or failure of businesses is performance. Although various research studies have been conducted on performance-related issues as they affect organizations, enterprises, and even manufacturing industries, academics have found it difficult to define it. Performance is perhaps the most extensively utilized dependent variable in organizational research today, according to Roger and Wright (1998), but it is also one of the most ill-defined conceptions. Researchers have found it difficult to define organizational performance because of its multiple connotations, according to Gavrea, Ilies, and Stegorean (2011). Firm performance, according to Divenney, Richard, Yip, and Johnson (2008), comprises the following key categories of firm outcomes: (a) financial (profits, return on assets, return on equity); (b) market performance (sales, market share); and (c) shareholder return (total shareholder return, economic value added). Accounting is concerned with measuring performance; marketing with customer satisfaction and market share; operations management with productivity and cost of operations; organizational behavior with employee satisfaction and structural efficiency; and finance with capital market responses to all of the above. In organizational research, performance is so prevalent that it is rarely openly evaluated or justified; instead, it is accepted as an indisputable assumption (Devinney et al, 2008).

Return on Capital Employed

Bankers, investors, and business analysts use return on capital as a profitability performance indicator to assess a company's efficiency in utilising available resources and financial strength, or to compare the efficiency of a number of alternative investments. Every investor's primary concern would be the amount of money he would receive as a return on his investment rather than the profit made by the company in which he invested. According to Pandian (2005), return reflects the entire efficiency of a company's capital investment. According to Atrill (2006), return on capital employed (ROCE) is a key measure of business performance because it expresses the link between net profit before interest and taxes generated over time and the average long-term capital invested in the business. Viewed from the entire business perspective the ROCE is a primary measure of profitability of returns to all supplies of long-term finance before any deduction for interest payable to lenders or payments of dividends to shareholders are made. It assesses the effectiveness with which funds have been deployed by company profit (output) with capital invested (input).

$$\text{Return on capital employed} = \frac{\text{profit after tax}}{\text{Equity} + \text{long term debt}}$$

Empirical Studies

Imeokparia and Oyinloye (2020) looked into how human capital investment affects bank performance in Nigeria. The study included a multiple regression analysis and a panel research approach. The study posed two research questions about the influence of human capital investments on Nigerian banks' returns on assets (ROA) and returns on equity (ROE). The research drew on secondary data from ten Nigerian listed banks' annual reports from 2010 to 2019. The findings revealed that investment in human capital development has a positive and significant impact on bank ROA, whereas ROE has a negative and insignificant impact on bank performance in Nigeria, with a p-value (0.0417 & 0.0000). The relationship between human capital development and organizational performance was investigated by Dawodu, Akintunde, and Olulana (2018) using data from seven manufacturing organizations. To test the research hypothesis, they used a descriptive design with a survey method and the Pearson coefficient of correlation. According to the findings, there is a link between human capital development and manufacturing company performance in the Food, Beverage, and Tobacco business in Lagos State. Omodero and Ihendinihu (2017) investigated Nigerian enterprises' human resource accounting and financial performance. Using SPSS software and multiple regression analysis as the statistical method, the hypotheses were tested at a 5% level of significance. PBC has a strong and beneficial influence on PAT, but a negative impact on Net Asset, according to the findings. As a result, the study finds that the importance of human resources in a company's financial growth cannot be overstated. Using performance indicators such as profitability ratios, dividend coverage ratios, debt-equity ratios, and efficiency ratios, Ezejiolor, Olise, and John-Akamelu (2017) determined the investment value of a telecommunication corporation in order to see if it is equivalent to commercial banks in Nigeria. To compute the ratios on profitability, dividend cover, long-term solvency, and operating efficiency, data were collected from seven years of annual reports and accounts of telecommunication enterprises and commercial banks, and the t-test statistic was employed to evaluate the hypotheses. The study found a large disparity in profitability between telecommunication companies and commercial banks in Nigeria, as well as a significant difference in coverage ratios between telecommunication companies and commercial banks in Nigeria. The adoption of Human Resource Accounting (increase in staff compensation, increment in staff, and staff retirement benefits) on the Profitability of Corporate Organizations was studied by Ezejiolor, John-Akamelu, and Iyidiobi (2017). The study used an exploratory research approach. With the help of SPSS version 20.0, data was

analyzed and assessed using the t-test statistical tool. Increases in staff salaries have a beneficial effect on organizational profitability, according to the study. In their study, Christian and Omodero (2016) looked at the influence of human capital expansion on bank financial results in Nigeria. The study employs multiple linear regression and a student test as statistical methods. As a result, there was no significant link between human capital and financial performance of banks. According to the study, greater attention should be directed to the development of human capital. The impact of human capital development on bank financial performance in Nigeria was studied by Charles (2016). Ex-post facto research was used in this study. According to the findings, there is no link between human capital growth and financial success. Ezejiofor, Nwakoby, and Okoye (2016) investigated the investment choice of a manufacturing firm to see if it is comparable to that of Nigerian commercial banks. Data were taken from seven years of annual reports and accounts of manufacturing enterprises and commercial banks, and t-test statistics were utilized with SPSS version 20.0 to test them. According to the findings, there is a considerable gap in profitability between industrial enterprises and commercial banks in Nigeria. Human Resource Management affects the success of corporate organizations, according to Ezejiofor, Nwakoby, and Okoye (2015). The hypotheses were investigated using simple regression analysis in this study, which used a survey research methodology. Human Resource Management has an impact on a company's performance, according to the research. This has to do with competent management as a motivator, as well as training and growth. A cross-sectional research of selected quoted businesses in Nigeria by Uzoamaka and Nweze (2015) looked at the impact of human capital investment on corporate performance. The researchers used a quantitative correlational design and stratified random sampling procedures, and they analyzed the data with SPSS 20 and Person correlation. According to the findings, investing in human capital has a favorable impact on employee value-added and profitability, whereas certain employees have a negative impact on profitability. The impact of human capital development on organizational productivity was investigated by Okoye and Ezejiofor (2013). Data was gathered from original sources in order to meet the study's objectives. The data was evaluated with the help of means, variance, and standard deviation, and the three hypotheses were checked with the help of the z-test statistical tool. The study discovered that human resource development is extremely important for any organization, little or large, because it is generally known that no firm can survive wholly without people beings. The authors used solely primary sources of data to measure organizational productivity, rather than both primary and secondary sources; likewise, the fixed asset turnover ratio should have been included. In a study titled Human Resource Accounting: Recognition and Disclosure of Accounting Methods and Techniques, Islam, Kamruzzaman, and Redwanuzzaman (2013) state that the major benefits of such accounting include developing effective managerial decision making, quality of management, preventing misuse of human resources, increasing human asset productivity, improving morale, job satisfaction, and creativity, and so on. According to Idaiganjo, Mukalu, and Kahiri (2012), assessing firm performance is difficult for businesses with a variety of goals, including profitability, employee satisfaction, productivity, growth, social responsibility, and the ability to adapt to a changing environment. They also assert that performance has been traditionally conceptualized in terms of financial measures such as Return on total assets (ROTA), and Return on Equity (ROE).

It was also obvious from the evaluation of empirical studies that human capital indicators had a favorable relationship with organizational performance. These factors, like as attendance at training and teamwork practices, tended to produce superstar performers, whose increased output might be transferred into improved organizational performance. Human capital theory states that a workforce with higher education and related skills makes it easier for a company

to adapt and apply new technology, implying a return on investment in employee education and training. Education, according to human capital theorists, is an investment since it increases production. According to the hypothesis, an organization's workforce's competence, knowledge, abilities, and skills contribute to its competitive advantage.

METHODOLOGY

Research Design

Ex-post facto research design was adopted for this study. Asika (2005) defined ex-post as a type of research study in which groups of participants are determined by pre-existing conditions and events from the past.

The population for this study comprised deposit money banks listed on the Nigeria Stock Exchange as at 2020. In order to reduce the large population size to a manageable size, judgmental sampling techniques were adopted to select the deposit money banks in Nigeria during the period of 2011-2020. A sample of Nine (9) Nigeria deposit money banks listed on Nigeria Stock Exchange for the period of 2011-2020 were selected. They include Union Bank Plc, Sterling Bank Plc, FCMB, UBA, Fidelity Bank Plc, Access Bank Plc, First Bank Plc, Guaranty Trust Bank Plc and Zenith Bank Plc.

The data were sourced from publications of the Nigerian stock exchange (NSE), and the annual report and accounts of the listed deposit money banks, particularly the comprehensive income statement and statement of financial positions of these companies as well as their respective notes to the accounts. Both the dependent and independent variables were computed from the data extracted from publications of the Nigerian stock exchange (NSE).

Method of Data Analysis

This study employed Ordinary Least Square (OLS) estimate using panel data from 2011 to 2020 covering a period of ten (10) years for 9 deposit money banks, to estimate and provide evidence on the nature of relationship between accounting information and share price. Inferential statistics of the hypotheses were carried out with the aid of E-view 9.0 statistical software, using coefficient of correlation and OLS Regression Analysis was used to predict the value of a variable based on the value of the other variables and to explain effect of changes in the values of the variables.

Model Specification

The study adopts the simple Regression Analysis valuation to examine the value relevance or degree of association between the stated variables. The empirical model is specified as follows: The independent variable is the human capital investment measured with Human Resource Accounting Disclosure Index (HRI).

$$ROCE = f(HRI) \dots \dots \dots i$$

The full specification of the regression equation is assumed to be;

$$ROCE = \beta_0 + \beta_1 HRI + \epsilon \dots \dots \dots 1$$

Where:

ROCE= return on capital employed

HRI = human resource accounting disclosure index

β_0 = Constant

β_1 = Co-efficient of HC

ϵ = Stochastic Error Term

Decision Rule:

Accept null hypothesis if P-value > 5% level of significance and reject null hypothesis and accept alternate hypothesis if p-value < 5% level of significance.

Table 1: Correlation Matrix

HRI	ROCE
1	-0.11476
-0.11476	1

Source: E-View 9.0output, 2021

From the table above, the correlation analysis aids in determining the degree of association between two or more variables. Pearson correlation coefficient was used to assess the strength of direction of the association between the variables. The Pearson correlation analysis reveals that HRI correlates negatively with ROCE (-0.11476).

Hypothesis One

Ho: Human capital investment has no significant effect on return on capital employed of selected listed deposit money banks in Nigeria.

Table 2: Simple regression analysis between HRI and ROCE

Dependent Variable: ROCE
 Method: Least Squares
 Date: 03/15/22 Time: 10:10
 Sample: 2011 2020
 Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.087297	0.060357	1.446342	0.1861
HRI	-0.162162	0.496302	-0.326741	0.7522
R-squared	0.013169	Mean dependent var		0.068000
Adjusted R-squared	-0.110185	S.D. dependent var		0.037357
S.E. of regression	0.039361	Akaike info criterion		-3.455203
Sum squared resid	0.012395	Schwarz criterion		-3.394686
Log likelihood	19.27601	Hannan-Quinn criter.		-3.521590
F-statistic	0.106760	Durbin-Watson stat		0.453036
Prob(F-statistic)	0.752248			

Source: E-View 9 output, 2021

The results of the regression on table 2 show that there is positive relationship between ROCE and HRI ($\beta_1 = -0.162162$). The slope coefficients show that the variables are not statistically significant because the probability values are higher than 5%. This implies that the variables have negative insignificant relationship with ROCE.

The result in table 2 indicates that the R-squared for the model is .013, meaning that the regression model used for this study predicts 13%. The independent variable explained 13% of the variation in ROCE. 87% of variation in ROCE is not explained by the regression model. The Durbin-Watson value of 0.453036 indicates the absence of serial correlation in model. From the test of coefficients result in table 2, the probability value of F-statistics = 0.106760 implies that the regression model is insignificant in predicting the relationship between the independent variable and the dependent variable. The significance between the variables is higher than $\alpha=0.05$.

Conclusion and Recommendation

The goal of this study was to look at the impact of human capital investment on the financial performance of deposit money banks that are listed on the Nigerian stock exchange. The data collected in this study were examined and tested using regression analysis. Based on the results of the inferential statistics, this investigation has revealed some interesting information. To summarize, the P-value of the test is greater than 0.05, according to the rule of thumb. As a result, human capital investment has no positive or significant impact on the return on capital employed by a few Nigerian listed deposit money banks.

The study concluded that firms should devote more financial resources or investment sources to human resources and personnel management in order to motivate individuals on the job, resulting in increased specialization and a beneficial impact on financial performance.

References

- Atrill, P. (2006). *Financial management for decision matters*, Hed, UK, Prentice-Hall.
- Charles, E. E. (2016). Effect of Human Capital Development on the Financial Performance of Banks in Nigeria: A Study of Selected Public Quoted Commercial Banks: *Journal of Advance Research in Business, Management and Accounting*, 3 (11), 1-32.
- Christian, N. W, Omodero, C. O. (2016). The Effect of Human Capital Development on Financial Performance of Banks in Nigeria: *Global Journal of Human Resource Management*, 4 (6),34-47.
- Dawodu, A. A, Akintunde, O. A, Olulana, B. S. (2018) Human Capital Development and Organizational Performance in the Food, Beverage and Tobacco Industry in Lagos State. *Nigeria: Nigerian Journal of Management Studies* 18, (2), 27-35.
- Ezejiofor, R. A., Olise, M. C., & John-Akamelu, R. C. (2017). Comparative analysis on investment decision of telecommunication and banking industries in Nigeria. *Journal of Finance and Economics*, 2017, Vol. 5, No. 2, 65-75 Available online at <http://pubs.sciepub.com/jfe/5/2/4> ©Science and Education Publishing DOI:10.12691/jfe-5-2-4.
- Ezejiofor R. A., John-Akamelu R. C. & Iyidiobi F. C. (2017). Appraisal of human resource accounting on profitability of corporate organization. 2017; 6(1): 1-10 <http://www.sciencepublishinggroup.com/j/econ>. DOI: 10.11648/j.econ.20170601.11 ISSN: 2376-659X (Print); ISSN: 2376-6603 (Online)
- Ezejiofor, R. A., Nwakoby, N. P., & Okoye, J. F. N. (2016). Comparative analysis of the investment decision of selected manufacturing firms and commercial banks in Nigeria. *International Journal in Management and Social Science*. 4(8), ISSN: 2321-1784 (Impact Factor- 5.276) 2056-5
- Ezejiofor, R. A., Nwakoby, N. P., & Okoye, J. F. N. (2015). Appraisal of human resource management in a performance of Nigerian business organizations. *International Journal of Advanced Research* 3(10) , 922 – 928. Journal homepage: <http://www.journalijar.com>.
- Imeokparia L. and Oyinloye J. B. (2020). Effect Of Human Capital Investment On Financial Performance Of Deposit Money Banks In Nigeria. *Journal of the Social Sciences*. 10(3), ISSN 1595-2738. © Faculty of Social Sciences, Usmanu Danfodiyo University, Sokoto Online ISSN 2384-7654
- Kucharcikova, A.. (2014). Investment in the human capital as the source of economic growth. *Periodica Polytechnica* 22:
- OECD. 2012. Policy Framework for Investment User’s Toolkit. Chapter 8. Human Resource Development. pp. 1–37. Available online: <https://www.oecd.org/investment/toolkit/policyareas/humanresourcedevelopment/Chapter%208%20HR%20Development.pdf> (accessed on 10 November 2021).
- OECD. 2020. Pillar B–Entrepreneurial human capital. In *SME Policy Index: Eastern Partner Countries 2020: Assessing the Implementation of the Small Business Act for Europe*. Paris: OECD Publishing, Brussels: European Union.
- Okoye, P. & Ezejiofor, R. (2013). The effect of human resources development on organizational productivity . *International Journal of Academic Research in Business and Social Sciences*, 3 (10).
- Popescu, C.R., and Gheorghe, N. P.. (2019). An exploratory study on a questionnaire concerning green and sustainable finance, corporate social responsibility, and performance: Evidence from the Romanian business environment. *Journal of Risk and Financial Management* 12: 162.

- Popescu, C. R. Gh. (2019a). Intellectual Capital, Integrated Strategy and Performance: Focusing on Companies' Unique Value Creation Mechanism and Promoting Better Organizational Reporting In Romania: A Framework Dominated by the Impact of Green Marketing and Green Marketing Strategies. Paper presented at 33rd International-Business-Information-Management-Association (IBIMA) Conference, Granada, Spain, April 10–11; pp. 1540–55.
- Popescu, Cristina Raluca Gh. 2019b. Intellectual Capital: Major Role, Key Importance and Decisive Influences on Organizations' Performance. *Journal of Human Resources Management Research* 2019: 509857.
- Pandian, P. (2005). *Security analysis and portfolio management*, New Delhi, Vikas.
- Šebestová, J. D. and Popescu, C. R. (2022). Factors Influencing Investments into Human Resources to Support Company Performance. *Journal of Risk Financial Manag.* 2022, 15, 19. <https://doi.org/10.3390/jrfm15010019>
- Umana, E. A., Okoli, I. C., Ubong Udo-Johnson, M., Onah, I. A., and Zubair, R. O. .(2021). Investigating the Impact of Covid-19 on Human Resource Development and Management of Godfather Investments Ltd., Calabar, Nigeria. *International Journal of Public Administration and Management Research* 6: 25–39.
- Uzoamaka, E. C., Nweze, A. U. (2015). The Effect of Human Capital Investment on Corporate Performance: A Cross Sectional Study of Selected Quoted Companies in Nigeria. *ICAN Journal of Accounting & Finance*, 2, 156-174.